



GENERAL MOTORS NORTH AMERICA
Structure & Safety Integration

August 14, 2006

Mr. Daniel C. Smith
Associate Administrator for Enforcement
National Highway Traffic Safety Administration
400 Seventh Street, S.W., Room 5321, MC: NVS-200
Washington, D.C. 20590

Dear Mr. Smith:

The following information is submitted pursuant to the requirements of 49 CFR Part 579.11. General Motors Corporation has decided to conduct a Safety Recall in Canada involving certain 2001-2007 model year U/B model vans.

This Safety Recall involves vehicles that were sold outside of the United States. General Motors manufactured these vehicles in the United States and sold substantially similar vehicles in the United States.

Vehicles identified in this letter as "substantially similar" under the broad definition specified in 49 CFR Part 579 and can have significant differences in design, performance, durability, etc. The vehicles may not be "substantially similar" except for purposes of reporting under 49 CFR Part 579.

Please contact me if you have any further questions concerning this report.

Sincerely,

Gay P. Kent

Director

Product Investigations

2006-0007/ 060089
Attachments

Product Investigations

Mail Code: 480-111-E18 • 30200 Mound Road • Warren, MI 48090-9010
2001-2007 UB Van Ball Joint Canada - 579 letter.doc



GENERAL MOTORS CORPORATION

579.11 REPORT

MANUFACTURER:	General Motors Corporation
MAKE:	Buick, Chevrolet, Oldsmobile, Pontiac, and Saturn.
MODEL & YEAR:	2001-2005 MY Pontiac Aztek (AWD), 2002-2005 MY Pontiac Montana (AWD), Chevrolet Venture (AWD), Oldsmobile Silhouette (AWD), 2002-2007 MY Buick Rendezvous (FWD & AWD) , 2005-2006 MY Pontiac Montana SV6 (AWD), Chevrolet Uplander (AWD), Buick Terraza (FWD & AWD) and Saturn Relay (AWD).
NUMBER OF VEHICLES:	Approximately 48,000
ACTION TYPE DETERMINATION:	Safety Recall / Decision was made by the manufacturer.
CONDITION:	Certain U/B Vans, equipped with independent rear suspensions, when operated at extreme cold temperatures and on rough roads, with increased suspension travel, can experience water and salt getting past the ball joint seal. The combination of these conditions may then lead to corrosion and premature ball joint wear. As a ball joint wears, it may result in noise, affect vehicle handling, or cause uneven tire wear. If the ball joint wear progresses to the point of separation from the lower control arm, the vehicle has reduced rear lateral, fore/aft, and up/down support at the affected side, and may be more difficult to control.
CORRECTION:	Dealers are to replace both ball joints with new ball joints which have a revised boot and ball stud to improve the seal to the ball stud shaft.
DATE OF DETERMINATION:	August 2006
ACTION COMMENCED:	October 2006 (estimated)
COUNTRIES INVOLVED:	Canada
SUBSTANTIALLY SIMILAR U.S. VEHICLE:	2001-2005 MY Pontiac Aztek (AWD), 2002-2005 MY Pontiac Montana (AWD), Chevrolet Venture (AWD), Oldsmobile Silhouette (AWD), 2002-2007 MY Buick Rendezvous (FWD & AWD), 2005-2006 MY Pontiac Montana SV6 (AWD), Chevrolet Uplander (AWD), Buick Terraza (FWD & AWD) and Saturn Relay (AWD).

ADDITIONAL
INFORMATION:

The combination of environmental conditions and pattern of vehicle use that has caused premature ball joint wear and separations in some Canadian vehicles is extremely rare in the U.S.

In extreme cold, if a vehicle is driven over rough roads that result in significant suspension travel, there can be a gap between the ball joint boot and the ball stud shaft. The gap can let water with dissolved salts into the ball joint grease. The grease may break down and cause premature wear of the ball stud. If there is enough wear and it is not detected during maintenance or other service, the ball stud may separate from the control arm.

The ball joint met all validation requirements. In order to make a leak occur, a lab test was conducted with ball joints exposed to a temperature of -30°C in conjunction with continuous cycling that represented significant suspension travel. Only one of three samples tested with glycol/water had a leak.

Ball joint separations in Canada occurred in areas that experience extreme cold. For example, the average of the lowest temperatures recorded in the years 2000-2005 in Ottawa, Ontario was -25.6°C and in Fort McMurray, Alberta was -40.8°C.

Thirty eight field samples were collected from vehicles throughout Canada to quantify wear rates and evidence of water intrusion. None of the twelve parts taken from urban areas of Quebec and Ontario had water intrusion. However, fifteen of twenty-six ball joints from the colder northern regions of Canada showed evidence of water intrusion. Evidence of ball joint water intrusion has only occurred on vehicles which were operated in extremely cold temperatures and driven primarily on rough roads in Canada.

The difference in environmental conditions and patterns of use is strongly reflected in the field experience. There have been forty-five incidents of ball joint separation in Canada among a population of approximately 48,000 vehicles. In the US, there have only been two separations, one in Montana (2001 Model Year) and one in Wisconsin (2003 Model Year), among a population of nearly 400,000 vehicles.

For model years 2001-2004, incident rate were compared between states bordering Canada that are likely to have temperatures close to Canadian temperatures (Alaska, Montana, North Dakota, Minnesota, Wisconsin, Michigan, New York, New Hampshire, Vermont, and Maine). The rate of occurrence in Canada is 66 times the rate for these border states (1.32 IPTV vs. 0.02 IPTV).

GM is continuing its investigation by obtaining sample ball joints from the U.S. border states for analysis. Based on the current data, field action is not being taken in the U.S.